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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/578,638

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Hiroki Kaihori

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EXAMINER

WILLIAMS, JEFFERY L

ART UNIT

PAPER NUMBER

2437

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/578,638	KAIHORI, HIROKI	
	Examiner	Art Unit	
	JEFFERY WILLIAMS	2437	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1 – 24 are pending.

This action is in response to the communication filed on 2/21/11.

All objections and rejections not set forth below have been withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuji et al. (Tsuji), “Remote Control System”, U.S. Patent Publication 2004/0056776 in view of Hisada et al. (Hisada), U.S. Patent 6,043,752.

Regarding claim 1, as best can be understood in view of the recitations, it is noted that Tsuji discloses:

an immobilizer unit including: a first data processor means; a first communication part connected with the first data processor means; a first antenna connected with the

first communication part; a first storage connected with the first data processor means
(Tsuji, fig. 1:2, see also fig. 1:1),

the first storage preliminarily storing first data for mutual authentication (Tsuji, fig. 11, par. 88); *and a second storage connected with the first data processor means* (Tsuji, fig. 11 – herein Tsuji discloses a plurality of locations for storage (“storage”));

and a portable unit including: a second data processor means; a second communication part connected with the second data processor means; a second antenna connected with the second communication part; and a third storage connected with the second data processor means (fig. 1:1, see also fig. 1:2),

the third storage preliminarily storing the first data for mutual authentication
(Tsuji, fig. 11);

and a fourth storage connected with the second data processor means, the fourth storage preliminarily storing second data for mutual authentication different from the first data for mutual authentication (Tsuji, fig. 11);

wherein:

the immobilizer unit further includes an information reception part connected with the first data processor means (Tsuji, fig. 1:11, 21), *and when a first instruction is fed into the information reception part* (Tsuji, fig. 1:11, 21 – computing devices operate according to instructions)

As noted above, Tsuji discloses the claimed apparatus or system, as Tsuji discloses the system comprising the structures of storage, transceivers, and data

processors (i.e. CPU). The examiner notes that while functional recitations may appear in a system or apparatus claim, the system or apparatus claims **must be structurally** distinguishable from the prior art (see M.P.E.P. 2114). Furthermore, the examiner reminds the applicant that “[A]pparatus claims cover what a device is, not what a device does.” *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990).

The examiner notes that the prior art above anticipates the claimed invention and is relied upon as disclosing the structure required by the claims (i.e. storage, transceivers, and data processors (i.e. CPU)). The examiner notes that applicant admits that the claimed “means” is only the structure of a data processor or CPU (e.g. see Brief, 8/12/10, pg. 2). However, regarding the various functional recitations of the claims featuring aspects pertaining the operation of the claimed system or apparatus, the examiner notes that the prior art below will continue to be referenced only for the applicant’s benefit and understanding of the prior art, so that the applicant may appropriately amend the claims to recite functional features of the claimed invention as method in an effort to distinguish from the cited prior art.

Tsuji discloses a vehicle security system wherein two communicating units comprise means for conducting bi-directional communication (Tsuji, par. 84, 92). Tsuji discloses *the first data processor means and the second data processor means authenticate each other by: (1) the first data processor means transmitting via the first antenna an ... data based on the first data for mutual authentication stored in the first storage and (2) the second data processor means receiving via the second antenna ...*

the ... data (Tsuji, par. 84,88,90). However, Tsuji does appear to disclose that data transmitted from the first data processor means is encrypted. Thus, Tsuji does not appear to disclose a means for encryption.

Hisada also discloses a vehicle security system wherein two communicating units comprise means for conducting bi-directional communication (e.g. Hisada, fig. 10, 11). Hisada discloses that the communications between the units should be encrypted (Hisada, 4:17-28; 16:48-55). Thus, Hisada discloses a means for encryption. It would have been obvious to one of ordinary skill in the art to employ encryption and decryption of transmitted and received data within the security system of Tsuji because one of ordinary skill in the art would have been motivated by the teachings for improving security (Hisada, 16:48-55).

Responsive to the authentication between the first data processor means and the second data processor means, the second data processor means transmits the second data for mutual authentication via the second antenna; the first data processor means further stores, into the second storage, the second data for mutual authentication received via the first antenna and transmits the second data stored in the second storage via the first antenna; and the second data processor means further stores, into the third storage, the second data for mutual authentication received via the second antenna (Tsuji, par. 43, 44, 49, 53).

Regarding claim 4, as best understood by the examiner, it is rejected, at least, for the same reasons as claim 1, and furthermore because, the combination enables:

Responsive to the authentication between the first data processor means and the second data processor means, the first data processor means generates, stores into the second storage, and transmits via the first antenna, second data for mutual authentication different from the first data for mutual authentication (Tsuji, par. 84, lines 1-6, fig. 10:33), and the second data processor means stores, into the third storage, the second data for mutual authentication received via the second antenna (Tsuji, par. 84, lines 6-10).

Regarding claim 5, as best understood by the examiner, it is noted that the limitations are not required by the claims (e.g. see recitations “*when both...*”). However, the examiner points out that the combination enables:

wherein, upon input of a second instruction into the information reception part, when both of data stored in the second storage and the third storage are the second data for mutual authentication, either the first data processor means generates and stores into the second storage first accumulation data different from the second data for mutual authentication, or the second data processor means generates and stores into the third storage the first accumulation data; and when both of data stored in the second storage and the third storage are identical to the first data for mutual authentication, either the first data processor means generates and stores into the second storage, second accumulation data different from the first data for mutual authentication, or the second data processor means generates and stores into the third storage the second accumulation data (Tsuji, par. 89).

Regarding claim 6, as best understood by the examiner, it is noted that the limitations are not required by the claims (e.g. see recitations “*when both...*”). However, the examiner points out that the combination enables:

wherein, upon input of a second instruction into the information reception part, when both of data stored in the second storage and the third storage are the second data for mutual authentication, the first data processor means transmits the first data for mutual authentication stored in the first storage via the first antenna, and the second data processor means stores, into the third storage, the first data for mutual authentication received via the second antenna; and when both of data stored in the second storage and the third storage are identical to the first data for mutual authentication, either the first data processor means generates and stores into the second storage, second accumulation data different from the first data for mutual authentication, or the second data processor means generates and stores into the third storage the second accumulation data (Tsuji, par. 89).

Regarding claim 7, as best understood by the examiner, it is noted that the combination enables:

wherein the portable unit further has a fifth storage preliminarily storing an ID code, and the first data processor means and the second data processor means authenticate each other also using the ID code (par. 84 – herein, Tsuji discloses receiving a signal comprising an ID code. The ID code is subsequently held for

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processing and performing operations using the code, thus requiring a means of storage).

Regarding claim 8, as best understood by the examiner, it is noted that the combination enables:

wherein the immobilizer unit further has a sixth storage, the second data processor means transmits, via the second antenna, the ID code stored in the fifth storage, and the first data processor means stores, into the sixth storage, the ID code received via the first antenna (Tsuji, par. 84, fig. 10:33).

Regarding claim 9, as best understood by the examiner, it is noted that the combination enables:

wherein upon input of a second instruction into the information reception part, the first data processor means generates third accumulation data different from the ID code stored in the sixth storage, and stores the third accumulation data into the sixth storage (Tsuji, fig. 11; par. 43).

Regarding claims 2, 3, and 10 – 24, they comprise essentially similar recitations as claim 1 - 9, and they are rejected, at least, for the same reasons.

Response to Arguments

Applicant's arguments are base upon the applicant's new amendment which removes the recitation of a second mutual authentication performed in response to a first mutual authentication (e.g. see claim 1). Applicant's arguments with respect to claims 1 - 24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFERY WILLIAMS whose telephone number is (571)272-7965. The examiner can normally be reached on 9:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eleni Shiferaw can be reached on (571)272-3867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeffery Williams/
Examiner, Art Unit 2437

/Eleni A Shiferaw/
Supervisory Patent Examiner, Art Unit 2437